



RATING AUTOMOBILE INSURANCE

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First, I would like to thank CEO Considine, President Lehman and the staff at the National Council of Insurance Legislators for giving me the opportunity to speak on this important topic to this august group.

The Insurance Information Institute commends the efforts at NCOIL to try to understand and address today's topic. Like NCOIL, the entire property/casualty insurance industry – companies, academic researchers, regulators, trade associations – has been focusing on this important issue.

It seems clear that all parties sincerely want a more equitable society, and working cooperatively we can find solutions that address the issue of systemic racism while preserving the competitive environment that allows the insurance industry to keep its promises and protect its customers.

At the same time it is important that the discussion be based on thorough, fact-based research. There are quite a few of these going on, as I will discuss later.

Triple-I has been asked today to comment specifically on research conducted under the auspices of Consumer Reports magazine. Consumer Reports has a well-deserved reputation for rigorous, independent product testing. Unfortunately, in this particular case, its research fell short.

The study, conducted in conjunction with ProPublica in 2017, attempted to be rigorous. It purported to find “substantial disparities in auto insurance prices between majority white and majority nonwhite neighborhoods. These disparities [it continued] were larger than risk levels could explain.”

The study, unfortunately, made elemental errors that, once corrected, showed the exact opposite of what ProPublica asserted: auto insurers charge prices that properly reflect the actual risk in majority white and majority nonwhite neighborhoods.

There are certain things it is important to know about rating variables:

- First: They work. They are effective at gauging the likelihood that a customer will be in an accident.
- Second: Every rating variable has been proved effective through actuarial analysis of actual data.
- Third: They are filed in advance with state regulators, along with statistical proof of their effectiveness. And they can't be changed without similar statistical analysis.
- Fourth: Companies constantly review how effective these factors are. If they don't work in the real world, they are adjusted or abandoned.
- Last but certainly not least: The setting of private-passenger auto insurance rates is a color-blind process. Insurers do not gather information based on race or income, nor do they discriminate against anyone on the basis of race or income.

The ProPublica study, published in 2017, alleges that auto insurers systematically price-gouged minority communities and areas with predominantly low-income households. In their words, "some major insurers charge minority neighborhoods as much as 30 percent more than other areas with similar accident costs."

That charge is simply inaccurate. Researchers, regulators and policymakers took the allegations seriously, examined them from different perspectives and in each case concluded that ProPublica got the analysis entirely wrong.

ProPublica looked at ZIP code level auto insurance losses in four states where that information is publicly available. Researchers fit a complicated mathematical model to those losses and compared the model's predictions of losses to the premium that a hypothetical driver would pay in those ZIP codes. They found "many of the disparities in auto insurance prices between minority and white neighborhoods are wider than differences in risk can explain."

Triple-I, like many insurance organizations, were concerned about the charges. If true, they would paint a damning portrait of the entire property/casualty industry.

Triple-I hired a highly respected actuarial firm, Pinnacle Actuarial Solutions. Their overview of the ProPublica study found "multiple concerns with the analysis and resulting conclusions." The most prominent: ProPublica didn't properly handle ZIP codes in which there wasn't a lot of data. The branch of mathematics that deals with thin data is called credibility, and it is part of the standard actuarial curriculum.

As far as we can tell, ProPublica did not make this standard actuarial adjustment.

It is actually not too hard to determine whether pricing models charge exorbitant amounts in minority neighborhoods. You just need to look at the losses incurred and the premiums earned in those neighborhoods and compare them with the losses incurred and the premiums earned elsewhere.

The metric to do this – and I think many of you will recognize it – is the loss ratio, which is losses divided by premiums.

If ProPublica were correct, minority neighborhoods would have loss ratios substantially lower than other neighborhoods. People buying insurance there would receive less back in loss payments per dollar spent than would those in other areas. Lower loss ratios in minority neighborhoods would be evidence of unfair discrimination.

Let's see what that simple, powerful analysis shows.

[Slide 2]

Here, an insurance trade group used the same loss data ProPublica got, and the actual premium data that corresponded with those losses, which it got from state regulators.

This shows Chicago and the rest of Illinois separately because ProPublica focused on the state this way, and the two areas are quite different, in both demographics and traffic patterns.

In both cases, the loss ratios are quite close. On the left, minority neighborhoods posted a loss ratio of 55 percent, meaning that for every dollar of premium policyholders paid, 55 cents was used to cover claims. That's slightly more than happened in other neighborhoods, where 53.8 cents of every premium dollar was used to pay claims.

So in Chicago, people in minority neighborhoods actually got a slightly better deal since they received slightly more of their premium back to handle claims, though the difference is pretty small and likely due to chance.

In the rest of Illinois, the situation is similar. Minority neighborhoods posted a loss ratio of 57.2 percent, just a little less than other neighborhoods. Again, the results are close. There is nothing approaching the level of overcharging that ProPublica's analysis implies. In fact there is no evidence of overcharging.

[Slide 3] shows results in two other states where ProPublica found discrepancies, and again you can see that when you look at real data, there is no evidence suggesting any accusations of rate disparities that ProPublica alleged. ProPublica got the analysis entirely wrong.

[Slide 4]

The state of Missouri did its own, more comprehensive analysis and concluded that “No evidence was found that would indicate that higher rated territories are charged more *relative to risk* than lower-rated territories,” adding in a footnote, “ProPublica got the analysis entirely wrong.”

Remember a few moments ago, I pointed out that the biggest mistake ProPublica made was failing to make standard actuarial adjustments to the data. What would happen if you used ProPublica’s methods, but adjusted them appropriately?

California regulators actually did this. They used ProPublica’s modeling to look for discrimination in individual rate filings, but they made the appropriate actuarial adjustments. California classified neighborhoods as underserved and non-underserved, but those terms align closely with minority and other neighborhoods. [Slide 5] shows the result.

In both cases, using actual data from actual filings, the Department of Insurance found that the areas in question paid considerably more for insurance – but that they also had considerably more expensive claim costs. This was consistent with the loss ratio analysis in Illinois, Missouri and Texas that we just looked at. It was consistent with what Missouri regulators found. The groups that pay higher insurance bills are higher risks to the insurance company. That’s the way insurance is supposed to be.

And it's another way of saying that ProPublica got the analysis entirely wrong.

[Slide 6 – Questions?]

The growing awareness of historical injustices make these unprecedented times. As the insurance industry, along with the rest of America's business and governmental institutions, examines past injustices and appropriate remedies, it makes sense to incorporate high quality, relevant research.

I belong to committees in both the Casualty Actuarial Society and the American Academy of Actuaries that are examining the matter. The NAIC is conducting research. The Insurance Research Council, which recently began a closer relationship with Triple-I, is looking into the impact of insurance credit scores and race. I'm sure that we all welcome such sober efforts in our united quest to create a more just society.

At Triple-I, we would strongly recommend any insurance policymakers or regulators look to research from organizations that have a credible, long-term commitment to understanding and improving the insurance industry. We would recommend you avoid overemphasizing the work of those who, though well-meaning, lack the grounding in property/casualty actuarial techniques, and therefore can reach incorrect conclusions that could have far-reaching, detrimental impacts.

Thank you again for allowing me the opportunity to speak today. I welcome any questions you might have.